



ONES Northeast Recycling Council

Jobs & the Economy Thanks to Recycling: Recycling Economic Information Studies October 26, 2021

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Institute of Scrap Recycling Industries, Inc.

June 26, 2020 | ISRI.ORG ISRI Presentation



The Voice of the Recycling Industry™

















Manufacturers Processors Industrial Consumers

Brokers & Traders Equipment/Services

\$117 Billion Industry Annually Recycling More Than 130 Million Tons of Recyclables

To promote safe, economically sustainable Our Mission & environmentally responsible recycling through networking, advocacy & education.

Workplace Safety Responsible Recycling Education, Training & Networking **Specifications** Design for Recycling[™] Market Intelligence **Awareness** Advocacy **COVID-19 Resources**



Federal Reserve Board Economic Projections

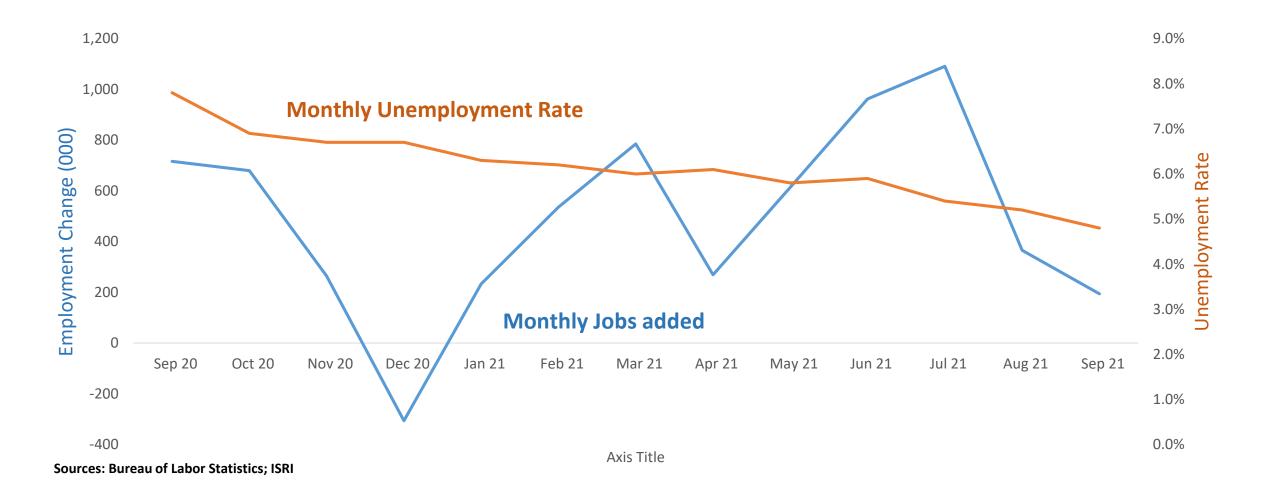


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Federal Reserve Board's Economic Projections, September 2021						
	2021	2022	2023	2024	Longer	
					Run	
Change in real GDP	5.9	3.8	2.5	2.0	1.8	
June projection	7.0	3.3	2.4		1.8	
Unemployment Rate	4.8	3.8	3.5	3.5	4.0	
June projection	4.5	3.8	3.5		4.0	
PCE Inflation	4.2	2.2	2.2	2.1	2.0	
June projection	3.4	2.1	2.2		2.0	
Core PCE inflation	3.7	2.3	2.2	2.1		
June projection	3.0	2.1	2.1			
Federal Funds Rate	0.1	0.3	1.0	1.8	2.5	
June projection	0.1	0.1	0.6		2.5	



Monthly Employment Changes, Unemployment Rate RECYCLING ESSENTIAL







Inflationary Pressure for Recyclable Materials

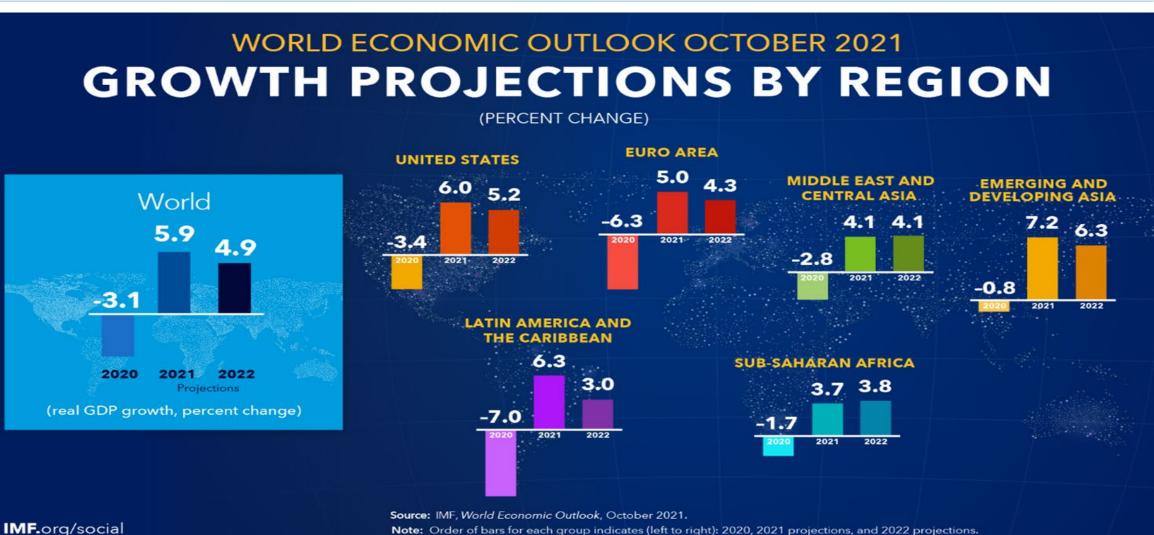


Recycling Industry Producer Price Percent Changes % change from preceding month (NSA) Sep 2020 (NSA)	renee or ano recopounty managemy							
Sep-21 Aug-21 Jul-21 Jun-21 May-21 Apr-21 Sep-21		Recycling	Industry P	roducer Pri	ce Percent (Changes		
Commodities Section Section Commodities Commodities Section Commodities Commodities							_	
Commodities Aluminum base* 9.7 1.4 -0.6 4.2 17.0 2.5 87.9 Copper base 2.9 -4.8 0.7 -3.4 7.6 3.0 40.0 Iron and Steel -3.2 -3.7 0.8 9.8 4.2 -3.3 61.5 Nonferrous* -3.0 -4.0 0.3 -1.7 11.2 4.2 27.1 Recyclable plastics 0.6 1.0 18.3 -11.4 8.6 6.9 31.0 Recyclable paper (formerly wastepaper) 5.1 3.7 21.9 12.7 3.0 5.3 109.9 Wholesaling of: Metals, minerals, and ores -4.7 6.8 5.2 13.3 5.2 1.6 87.7 Chemicals and allied products -1.4 3.4 -1.6 0.3 3.1 -2.0 0.9 Paper and plastics products 3.2 -0.5 0.6 -2.1 3.1 1.8 12.9 *Monthly data for these series are seasonally adjusted		Sep-21	Aug-21	Jul-21	Jun-21	May-21	Apr-21	Sep-21
Commodities Aluminum base* 9.7 1.4 -0.6 4.2 17.0 2.5 87.9 Copper base 2.9 -4.8 0.7 -3.4 7.6 3.0 40.0 Iron and Steel -3.2 -3.7 0.8 9.8 4.2 -3.3 61.5 Nonferrous* -3.0 -4.0 0.3 -1.7 11.2 4.2 27.1 Recyclable plastics 0.6 1.0 18.3 -11.4 8.6 6.9 31.0 Recyclable paper (formerly wastepaper) 5.1 3.7 21.9 12.7 3.0 5.3 109.9 Wholesaling of: Metals, minerals, and ores -4.7 6.8 5.2 13.3 5.2 1.6 87.7 Chemicals and allied products -1.4 3.4 -1.6 0.3 3.1 -2.0 0.9 Paper and plastics products 3.2 -0.5 0.6 -2.1 3.1 1.8 12.9 *Monthly data for these series are seasonally adjusted								
Aluminum base* 9.7 1.4 -0.6 4.2 17.0 2.5 87.9 Copper base 2.9 -4.8 0.7 -3.4 7.6 3.0 40.0 Iron and Steel -3.2 -3.7 0.8 9.8 4.2 -3.3 61.5 Nonferrous* -3.0 -4.0 0.3 -1.7 11.2 4.2 27.1 Recyclable plastics 0.6 1.0 18.3 -11.4 8.6 6.9 31.0 Recyclable paper (formerly wastepaper) 5.1 3.7 21.9 12.7 3.0 5.3 109.9 Wholesaling of: Wholesaling of: Metals, minerals, and ores -4.7 6.8 5.2 13.3 5.2 1.6 87.7 Chemicals and allied products -1.4 3.4 -1.6 0.3 3.1 -2.0 0.9 Paper and plastics products 3.2 -0.5 0.6 -2.1 3.1 1.8 12.9	Final Demand*	0.5	0.7	1.0	0.6	0.9	1.0	8.6
Copper base 2.9 -4.8 0.7 -3.4 7.6 3.0 40.0 Iron and Steel -3.2 -3.7 0.8 9.8 4.2 -3.3 61.5 Nonferrous* -3.0 -4.0 0.3 -1.7 11.2 4.2 27.1 Recyclable plastics 0.6 1.0 18.3 -11.4 8.6 6.9 31.0 Recyclable paper (formerly wastepaper) 5.1 3.7 21.9 12.7 3.0 5.3 109.9 Wholesaling of: Wholesaling of: Metals, minerals, and ores -4.7 6.8 5.2 13.3 5.2 1.6 87.7 Chemicals and allied products -1.4 3.4 -1.6 0.3 3.1 -2.0 0.9 Paper and plastics products 3.2 -0.5 0.6 -2.1 3.1 1.8 12.9 *Monthly data for these series are seasonally adjusted	Commodities							
Iron and Steel	Aluminum base*	9.7	1.4	-0.6	4.2	17.0	2.5	87.9
Nonferrous*	Copper base	2.9	-4.8	0.7	-3.4	7.6	3.0	40.0
Recyclable plastics 0.6 1.0 18.3 -11.4 8.6 6.9 31.0	Iron and Steel	-3.2	-3.7	0.8	9.8	4.2	-3.3	61.5
Wholesaling of: Metals, minerals, and ores	Nonferrous*	-3.0	-4.0	0.3	-1.7	11.2	4.2	27.1
Wholesaling of: Metals, minerals, and ores -4.7 6.8 5.2 13.3 5.2 1.6 87.7 Chemicals and allied products -1.4 3.4 -1.6 0.3 3.1 -2.0 0.9 Paper and plastics products 3.2 -0.5 0.6 -2.1 3.1 1.8 12.9 *Monthly data for these series are seasonally adjusted	Recyclable plastics	0.6	1.0	18.3	-11.4	8.6	6.9	31.0
Metals, minerals, and ores -4.7 6.8 5.2 13.3 5.2 1.6 87.7 Chemicals and allied products -1.4 3.4 -1.6 0.3 3.1 -2.0 0.9 Paper and plastics products 3.2 -0.5 0.6 -2.1 3.1 1.8 12.9 * Monthly data for these series are seasonally adjusted	Recyclable paper (formerly wastepaper)	5.1	3.7	21.9	12.7	3.0	5.3	109.9
Metals, minerals, and ores -4.7 6.8 5.2 13.3 5.2 1.6 87.7 Chemicals and allied products -1.4 3.4 -1.6 0.3 3.1 -2.0 0.9 Paper and plastics products 3.2 -0.5 0.6 -2.1 3.1 1.8 12.9 * Monthly data for these series are seasonally adjusted	220 1 10 6							
Chemicals and allied products -1.4 3.4 -1.6 0.3 3.1 -2.0 0.9 Paper and plastics products 3.2 -0.5 0.6 -2.1 3.1 1.8 12.9 * Monthly data for these series are seasonally adjusted		4.7	6.0	5 2	42.2	F 2	4.6	07.7
Paper and plastics products 3.2 -0.5 0.6 -2.1 3.1 1.8 12.9 * Monthly data for these series are seasonally adjusted								
* Monthly data for these series are seasonally adjusted	Chemicals and allied products	-1.4	3.4	-1.6	0.3	3.1	-2.0	0.9
	Paper and plastics products	3.2	-0.5	0.6	-2.1	3.1	1.8	12.9
	* No water to date for the consequence are consequently adjusted							



IMF Outlook – Growing World Economies

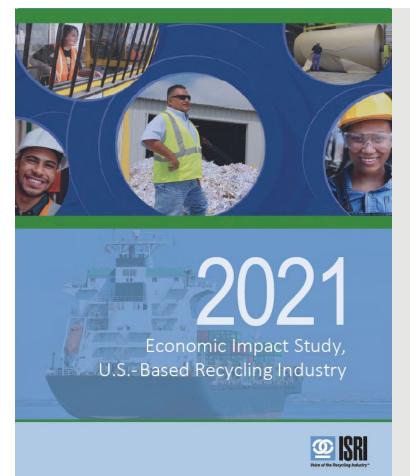






ISRI Economic Impact Study





- Measures economic impact of the U.S. recycling industry
- Direct, supplier, induced
- Jobs, wages, economic impact, taxes
- http://www.isri.org/economicimpact



Uses of Economic Impact Study



- Most states and many localities provide different types of economic development incentives including energy credits, employment credits and tax abatements.
- Firms like scrap recyclers often require special services from local government including curb cuts, zoning exemptions, or traffic control measures (like stoplights).
- Government assistance generally requires that a firm prove that they can retain or create new jobs.
- The ISRI economic impact study can be used to provide companies with data on how many ancillary jobs the firm – and the industry – creates in a community.
- <u>Member benefit:</u> Individual reports for economic development purposes can be created for a firm or a specific impact application quickly and inexpensively.



More Uses of Economic Impact Model



- Grant Applications
- Corporate planning
- Transportation Planning and Purchasing
- Transportation Planning and Purchasing
- Industry Analysis



2020 Recycled Materials Tonnage











Recycling Industry Economic Impact



ECONOMIC IMPACT

(11) \$116,835,521,300 **TOTAL JOBS** TOTAL WAGES **(3)** \$34,392,243,100 强 \$12,301,077,100

Source: ISRI 2021 Recycling Industry Economic Impact Study

506,139

TAXES



United States Economic Impact



	Direct	Supplier	Induced**	Total	
Economic Impact	\$46,386,125,000	\$35,354,441,800	\$35,094,954,500	\$116,835,521,300	
Johs	159,640	153,983	192,516	506,139	
Wages	\$12,334,813,000	\$11,011,191,900	\$11,046,238,200	\$34,392,243,100	
Taxes Generated			<i>y</i>	\$12,301,077,100	
			1911		
The Recycling Industry's Total Economic Impact in The United States of America \$116.84 BILLION					



Direct and Supplier Impacts



Direct Impacts	Jobs	Wages	Economic Impact
Recyclers	151,256	\$11,647,101,400	\$44,239,623,400
Brokers	8,384	\$687,711,600	\$2,146,501,600
TOTAL DIRECT IMPACTS	159,640	\$12,334,813,000	\$46,386,125,000

Supplier Impacts	Jobs	Wages	Economic Impact
Agriculture	6,303	\$296,661,800	\$524,881,200
Mining	1,644	\$136,565,800	\$1,002,822,900
Construction	1,199	\$80,371,000	\$256,907,900
Manufacturing	20,250	\$1,631,403,700	\$9,824,244,400
Transportation & Communication	16,904	\$1,422,853,600	\$4,857,730,500
Wholesaling	12,017	\$1,082,980,100	\$3,546,298,200
Retailing	1,346	\$56,146,600	\$155,425,900
Finance, Insurance, & Real Estate	15,765	\$980,409,600	\$4,244,625,200
Travel & Entertainment	9,439	\$316,435,400	\$761,832,700
Business & Personal Services	66,963	\$4,799,936,700	\$9,736,499,700
Government	2,153	\$207,427,600	\$443,173,200
TOTAL SUPPLIER IMPACTS	153,983	\$11,011,191,900	\$35,354,441,800



Induced and Total Impacts



Induced Impacts	Jobs	Wages	Economic Impact
Agriculture	3,481	\$109,107,500	\$457,627,700
Mining	505	\$39,100,000	\$271,742,000
Construction	1,402	\$91,981,600	\$306,399,400
Manufacturing	8,340	\$636,743,200	\$4,602,100,200
Transportation & Communication	11,849	\$1,063,443,900	\$4,107,705,300
Wholesaling	5,144	\$494,286,500	\$1,750,202,000
Retailing	24,594	\$915,728,000	\$2,337,921,000
Finance, Insurance, & Real Estate	22,851	\$1,488,863,200	\$9,025,921,700
Travel & Entertainment	28,813	\$896,052,000	\$2,338,341,600
Business & Personal Services	78,520	\$4,905,509,900	\$9,028,809,100
Government	2,178	\$207,595,900	\$540,703,400
Other	4,839	\$197,826,500	\$327,481,100
TOTAL INDUCED IMPACTS	192,516	\$11,046,238,200	\$35,094,954,500
TOTAL IMPACTS	506,139	\$34,392,243,100	\$116,835,521,300
Taxes	Federal	State	Total Taxes
	\$7,332,543,700	\$4,968,533,400	\$12,301,077,100



New York State Economic Impact





	ECONOMIC IMPACT
~	\$4,703,051,100
	TOTAL JOBS
	19,691
	TOTAL WAGES
6	\$1,596,819,900
	TAXES
	\$578,866,400



Pennsylvania Economic Impact







Portland, Maine Economic Impact

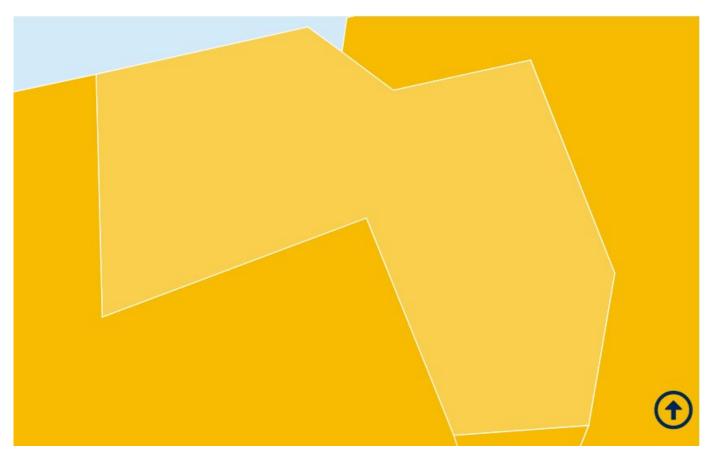






Connecticut CT 1 Economic Impact





ECONOMIC IMPACT

TOTAL JOBS



TOTAL WAGES





U.S. Recyclable Exports Economic Impact



The Economic Impact of U.S. Exports of Recyclable Materials

	Direct	Supplier	Induced*	Total
Economic Impact	\$12,535,188,000	\$10,021,586,200	\$10,552,436,900	\$33,109,211,100
Jobs	50,543	47,240	62,869	160,652
Wages	\$3,715,810,400	\$3,281,137,500	\$3,415,184,000	\$10,412,131,900
Taxes Generated				\$3,759,332,200



Recycling Benefits

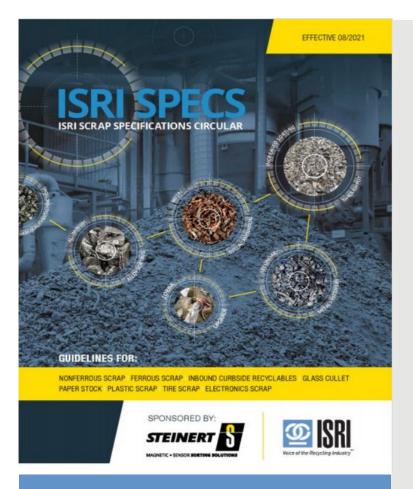


- •Nonferrous metals can be recycled an infinite number of times.
- •About **75 percent of aluminum** produced since commercial manufacturing began in the 1880s is **still in productive use as secondary raw material.**
- Manufacturing paper and paper board with recycled materials
 uses up to 68 percent less energy than using virgin materials.
- •Using recycled plastics in manufacturing saves up to 88 percent of the energy needed to produce plastics from virgin materials.
- •U.S. recyclers process more than 5 million tons of electronics products a year.
- •The use of recycled rubber in molded products reduces greenhouse gas emissions 25 to 80 percent compared with the use of virgin plastic resins.



ISRI Specifications



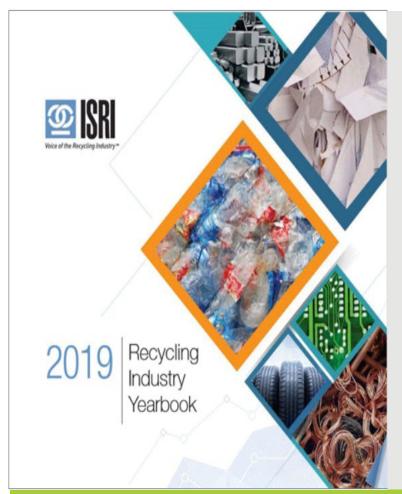


- Domestic Transactions
- International Transactions
- Updated to reflect marketplace
- http://www.scrap2.org/specs/



ISRI Recycling Industry Yearbook





- Introduction to recycling
- Recycling's benefits, challenges, and opportunities
- Major Commodities
- Statistical Appendixes
- http://www.isri.org/recyclingcommodities/recycling-industryyearbook



ISRI Upcoming Events and Resources



ISRI Resources Include:



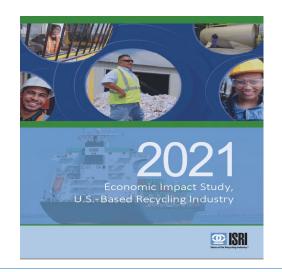
2021 Virtual Fall ISEC Conference

3-Part Series: Safety & Environmental Issues
of the Recycling Industry
Nov 9 | Nov 16 | Nov 23 | 2:00 – 4:00 PM ET















Please contact me with additional questions.

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